REMARKS

Claims 1-5 and 7-28 are pending in the application. Claims 1, 5, 13, 19-21, 23, 24 and 26 stand rejected as obvious under 35 U.S.C. 103(a) over Bradley et al. (WO 02/42747) in view of Saren Johnston, *Sensible Sensors*, Ames Laboratory INSIDER Newsletter, Volume 13, No. 3, (March 2002), and further in view of Spangenberg et al. (U.S. 6,485,687).

As described in detail below, the limitations of claim 5 have been incorporated by amendment into the pending independent claims; 1, 20 and 21. Applicant respectfully submits that claim 5, as previously presented, was patentable over the combination of Bradley, Johnston and Spangenberg. In addition, applicant has amended claims 1, 20 and 21 to recite that the sensor is fully disposable. Support for this newly added claim limitation may be found at page 1 line 11 and page 19, line 1 of the international application as published. Accordingly, Applicant contends that all claims as amended are in condition for allowance.

Claim 1 as amended recites a sensor having among other elements the following:

- a single flexible carrier holding all components,
- with the sample holder comprising an active layer and
- the sensor being of the reflective type.

The examiner has rejected claim 1 and claim 5 as previously presented over the combination of the Bradley, Johnston and Spangenberg references. The examiner acknowledges that Bradley does not teach all of the three elements listed above. The examiner relies upon Johnston to teach the element of the sample holder comprising an active layer and the sensor being of a reflective type. The examiner further relies on Spangenberg in an attempt to show that flexible carriers in similar sensors were known.

What the examiner refers to however, as a flexible "carrier material" in Spangenberg is not analogous to the carrier material of the claimed embodiments or the Bradley and Johnston references. In particular, Spangenberg relates to a chromatography device. In chromatography a sample is separated into its components by moving the sample over or through a material which interacts physically or chemically with the different sample components. (See Col. 1, Lines 6-15) This is typically done by dissolving the sample in an eluent (or mobile phase) that is flown over or through a thin plate (which material may also be referred to as the immobile phase). Depending on the strength of the interaction, a sample component moves faster or slower across

or through the plate resulting in a spatial distribution of substances which may then be optically analyzed.

It is important to note with respect to the plate disclosed in Spangenberg, "it is insignificant whether the carrier is rigid or flexibly formed from glass, polyester or the like, so long as it is accessible to an optical investigation of the developed chromatogram." (Emphasis added, col. 1, line 40).

Applicant respectfully submits that the Spangenberg "flexible carrier" is thus entirely non-analogous to the claimed flexible carrier, other than the coincidence that both are called "carriers" in their respective fields. In the clamed embodiments, the carrier material is the substrate supporting or defining the active components, i.e. the photodiodes, the sample holder and active layer. Since the claimed flexible carrier houses, is a part of or supports active optical electronic devices its flexibility is particularly challenging and may require specific sample holder and optical path configurations. This is clearly distinct from the carrier material of Spangenberg where the active optoelectronic components are all shown as being external to the carrier material. (See Fig. 1). In addition Spangenberg states that the flexibility of the chromatogram substrate is irrelevant.

The examiner must determine what is "analogous prior art" for the purpose of analyzing the obviousness of the claimed subject matter at issue. "Under the correct analysis, any need or problem known in the field of endeavour at the time of the invention and addressed by the patent [or application at issue] can provide a reason for combining the elements in the manner claimed. KSR International Co. v. Teleflex Inc., 550 U.S. 398, 82 USPQ2d 1385, 1397 (2007). Applicant respectfully submits that Spangenberg does not provide any reason for the combination of references relied upon by the examiner since the reference itself states that the flexibility or inflexibility of the substrate is insignificant. Thus the three references relied upon by the examiner, viewed together do not support an obviousness rejection of claim 1 as amended.

In addition, claims 1, 20 and 21 have been amended to recite a fully disposable sensor. In the claimed embodiments, all active parts are included on one carrier which is disposable as a unit. The Spangenberg system which involves remote optical detection apparatus is clearly not disposable. Bradley involves a microfabricated detection system that does not appear to be disposable. Johnston explicitly states that "the only component that would not be disposable, at

least in the foreseeable future, would be the photodetector." Accordingly, the references relied upon by the examiner to support the rejection of claims 1, 20 and 21 are either silent regarding disposability, or teach away from a fully disposable unit.

Applicant believes that the pending claims are in condition for allowance. If it would be helpful to obtain favorable consideration of this case, the Examiner is encouraged to call and discuss this case with the undersigned.

This constitutes a request for any needed extension of time and an authorization to charge all fees therefore to deposit account No. 19-5117, if not otherwise specifically requested. The undersigned hereby authorizes the charge of any fees created by the filing of this document or any deficiency of fees submitted herewith to be charged to deposit account No. 19-5117.

Respectfully submitted,

Date: September 21, 2009

/James L. Brown/

James L. Brown, #48,576
Swanson & Bratschun, L.L.C.
8210 Southpark Terrace
Littleton, CO 80120
Telephone: (303) 268-0066
Facsimile: (303) 268-0065

S:\ClientFolders\0064 (Vereenigde)\24\OA 02 Response - Final.doc